

# **TITLE 23: CALIFORNIA CODE OF REGULATIONS**

## **WATERS**

### **DIVISION 3: STATE WATER RESOURCES CONTROL BOARD**

#### **CHAPTER 16: UNDERGROUND STORAGE TANK REGULATIONS**

##### **NOTICE OF PROPOSED RULEMAKING**

**NOTICE IS HEREBY GIVEN THAT THE STATE WATER RESOURCES CONTROL BOARD PROPOSES TO ADOPT AMENDMENTS TO THE UNDERGROUND STORAGE TANK REGULATIONS AFTER CONSIDERING ALL COMMENTS, OBJECTIONS, AND RECOMMENDATIONS REGARDING THE PROPOSED ACTION**

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**PROPOSED REGULATORY ACTION:** The State Water Resources Control Board (SWRCB) proposes to amend section 2611 in Title 23 of the California Code of Regulations (CCR). This section concerns underground storage tanks.

##### **PUBLIC HEARING AND WRITTEN COMMENT PERIOD**

The SWRCB will hold a public hearing on the proposed regulations at 10:00 a.m., on December 10, 2004 in the Sierra Hearing Room at 1001 "I" Street, Sacramento, CA. Pursuant to Government Code section 11346.8, reasonable accommodation or sign language interpreting services will be provided upon request. Such requests should be made no later than 15 days prior to the date of the public hearing.

Any written statements, arguments or contentions related to the proposed regulations must be received by 5:00 p.m. on December 10, 2004. Submit written comments to: Scott Bacon, State Water Resources Control Board, Clean Water Programs, 1001 "I" Street, P.O. Box 944212, Sacramento, CA, 94244-2120. Written comments, arguments, or contentions sent by mail or hand-delivered are requested (but not required) to be submitted in triplicate. Comments by FAX (916-341-5808) must be received before 5:00 p.m. on the last day of the public comment period.

##### **AUTHORITY AND REFERENCE**

Water Code sections 185 and 1058, and Health and Safety Code (HSC) sections 25299.3 and 25299.7, authorize the SWRCB to adopt the proposed regulations, which would implement, interpret, and make specific a term used in HSC section 25290.1.

## **INFORMATIVE DIGEST / POLICY STATEMENT OVERVIEW**

California's Legislature enacted Chapter 6.7 of the HSC in 1984. Since then, it has amended Chapter 6.7 in response to federal mandates relating to underground storage tanks (USTs), or to new information regarding changing industry practices and/or the performance of USTs meeting regulatory standards. In response to findings of widespread vapor releases from USTs in California, the Legislature passed Assembly Bill (AB) 2481 (stats.2002, ch.999). AB 2481 required significantly improved continuous monitoring methods for newly-installed USTs, specifically that the interstitial space be maintained under vacuum or pressure. Significantly, AB 2481 set forth a performance standard that "a breach in the primary or the secondary is detected before the liquid- or vapor-phase of the hazardous substance stored in the underground storage tank is released into the environment." (HSC, § 25290.1, subd. (e).)

Although vacuum and pressure continuous monitoring methods have been reliably used for decades in Europe, they are relatively new to California. Due to concerns about availability of approved vacuum or pressure methods, the Legislature passed Assembly Bill 1702 (stats. 2003, ch.42), postponing the effective date for this requirement to July 1, 2004.

At the time of development of AB 2481, a well-established method for monitoring tanks was available in California, the "brine tank" monitoring method, also referred to as the "hydrostatic" monitoring or "interstitial liquid level measurement" (ILLM) method. Brine tanks rely on a positive head pressure within the interstitial space that is greater than the stored substance under operating conditions within the primary containment. This positive head pressure is maintained through use of a liquid reservoir atop the tank that triggers an alarm if the reservoir level falls significantly. This type of monitoring relies on the fact that the liquid level within the interstice is always higher than that within the primary tank. The higher liquid level results in a higher hydrostatic pressure within the interstice than in the primary tank. Depending on the level of groundwater surrounding the tank, the liquid level within the interstice would move up or down in the event of a leak. However, the hydrostatic pressure within the interstice ensures that the hazardous substance stored in the tank cannot escape to the environment without first activating an alarm. This approach ensures that any breach in the primary or the secondary containment will be detected before the hazardous substance is released to the environment. In recognition that the level of environmental protection of the brine tank method met the stated performance standard, AB 2481 was amended to specifically allow the brine tank method for newly-installed USTs by stating that the "use of interstitial liquid measurement methods satisfies the requirements of this subdivision."

After AB 2481 was enacted, certain manufacturers proposed to market other ILLM methods, specifically for monitoring of pressurized piping, not contemplated when the bill was developed. Certain of these proposed ILLM methods for pressurized piping do not maintain a head pressure within the interstitial space that is greater than operating conditions within the primary containment, as is the case for brine tanks. A pressurized piping system typically operates between 30 and 45 pounds per square inch (psi),

whereas the pressure proposed to be maintained in the interstice and reservoir would be only 0.5 psi, rather than overpressured, as for brine tanks.

ILLM methods that do not maintain the interstice at greater pressure than that found within the primary containment do not offer the same level of environmental protection or reliable leak detection as the brine tanks envisioned when AB 2481 was written. If there were simultaneous breaches in the primary and secondary containment of pressurized piping and if the rate of flow out of the primary containment were similar to the rate of flow out of the secondary containment, there might not be enough volumetric change of liquid in the reservoir for the leak to be detected. This leak scenario could continue without detection even under normal system operation, if the leak rates in both primary and secondary containment closely matched the operating parameters of the system. Such methods would not fulfill the performance standard stated in AB 2481 that “a breach in the primary or secondary containment is detected before the liquid- or vapor-phase of the hazardous substance stored in the underground storage tank is released into the environment.” Nevertheless, because the methods rely on interstitial liquids for monitoring, the manufacturers argue that they are acceptable pursuant to AB 2481. This has led to confusion regarding the regulatory status of these methods.

Monitoring of this type does not provide the same level of environmental protection as the interstitial liquid level measurement method in use at the time AB 2481 was written and adopted. Furthermore, monitoring of this type cannot always detect breaches in the primary or secondary containment before the hazardous substance stored in the underground storage tank is released into the environment, as is required by AB 2481. Therefore, it is important to clarify in regulation that the term “interstitial liquid level measurement” refers to a system that maintains the interstice at a pressure greater than that found in the primary containment of the component being monitored.

The proposed regulations will clearly define the term “interstitial liquid level measurement method” as used in section 25290.1(e) of the Health and Safety Code. Having a clear definition of this term in regulations will promote consistent application of this requirement by local regulatory agencies throughout the state. It will also forestall the installation of interstitial liquid level measurement methods that do not meet the proposed regulatory definition, thus helping to ensure that the environment is adequately protected from releases of hazardous substances from UST systems. This regulation would not impact existing UST facilities, and would not affect the design or future applicability of the hydrostatic monitoring systems that have been used for many years on tanks.

## **FISCAL IMPACT ESTIMATES**

**Mandates on Local Agencies and School Districts pursuant to Part 7 (commencing with section 17500) of Division 4 of the Government Code:** The SWRCB has determined that the proposed regulations would not impose a mandate on local agencies or school districts nor are there any costs for which reimbursement is required by Part 7 (commencing with Section 17500) of Division 4 of the Government Code. There are no other non-discretionary costs or savings imposed upon local agencies or school districts.

**Cost or Savings to any State Agency:** The SWRCB and the Regional Water Quality Control Boards will not incur additional costs or savings as a result of the proposed emergency regulations. Other State agencies will not incur additional costs or savings as a result of the proposed emergency regulations.

**Other Non-discretionary Costs or Savings to Local Agencies:** The SWRCB has determined that the proposed regulations would not impose a mandate on local agencies or school districts nor are there any costs for which reimbursement is required by Part 7 (commencing with Section 17500) of Division 4 of the Government Code. There are no other non-discretionary costs or savings imposed upon local agencies or school districts.

**Cost or savings in federal funding to the state:** The SWRCB has determined that the regulation will involve no costs or savings in federal funding to the State.

## **ECONOMIC IMPACT ESTIMATES**

**Statement of Significant Statewide Adverse Economic Impact Directly Affecting California Businesses:** The SWRCB has made an initial determination that the proposed regulations will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states.

**Types of Businesses Affected:** Any business that plans to install a new UST system that is not categorically exempt from the UST regulations may be affected by the proposed regulations. These businesses are mostly retail fuel service stations either owned or leased-out by major petroleum distributors, or small, independently owned facilities. Other businesses affected include those that own or operate USTs for their own use, such as factories, equipment rental yards, construction companies, mines, etc.

**Projected Reporting, Record keeping, and Other Compliance Requirements:** None

**Potential Impact on Private Persons or Businesses Directly Affected:** The Board is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

**Effect on the Creation or Elimination of Jobs within California:** The SWRCB has determined that these regulations will not have any effect on the creation or elimination of jobs within California.

**Effect on the Creation of New Businesses or Elimination of Existing Businesses within California:** The SWRCB has determined that these regulations will not have any effect on the creation of new businesses or elimination of existing businesses within California.

**Effect on the Expansion of Businesses Currently Doing Business in California:** The SWRCB has determined that these regulations will not have any effect on the expansion of businesses currently doing business in California.

**Potential Significant Impact on Housing Costs:** None.

### **EFFECT ON SMALL BUSINESS**

The SWRCB has determined that this regulation will not have any effect on the small businesses within California. This regulation would not impact existing UST facilities, and only affects new UST systems. There are several monitoring methods that would not be impacted by this regulation, are currently available, and will comply with the monitoring requirement for new UST systems.

### **CONSIDERATION OF ALTERNATIVES**

In accordance with Government Code section 11346.5(a)(13), the SWRCB must determine that no reasonable alternatives it considered, or that have otherwise been identified and brought to its attention, would be more effective in carrying out the purpose for which the action is proposed, or would be as effective and less burdensome to affected private persons, than the proposed action.

### **AVAILABILITY OF STATEMENT OF REASONS AND TEXT OF PROPOSED REGULATIONS**

The SWRCB has prepared the following for public review: 1) an initial statement of reasons for the proposed amendments; 2) a rulemaking record which contains all of the information upon which the proposed amendments are based; and 3) the text of the proposed amendments. Copies of these documents will be available upon request by writing to the SWRCB, attention: Mrs. Barbara August, Division of Water Quality, Underground Storage Tank Program, 1001 "I" Street, 17<sup>th</sup> Floor, P.O. Box 2231, Sacramento, CA, 95812. This address is also the location of public records, including reports, documentation, and other material related to the proposed amendments. Copies of these documents are also available on the SWRCB Underground Storage Tank Program website at: <http://www.swrcb.ca.gov/ust/>. Upon completion of the public comment period for this proposed rulemaking, the SWRCB will prepare a final statement of reasons for proposed amendments, which will also be available upon request at the above address and website.

### **AVAILABILITY OF CHANGED OR MODIFIED TEXT**

After the close of the comment period, the SWRCB may adopt the proposed regulations. If substantive changes are made, the modified text will be made available for comment for at least 15 days prior to adoption, and sent to the following persons: all persons who

testified at the public hearing; all persons who submitted written comments at the public hearing; all persons whose comments were received by the SWRCB during the public comment period; and all persons who requested notification from the SWRCB of the availability of such changes.

Please direct all written comments, procedural inquiries, and technical questions to:

**Mr. Scott Bacon**  
**State Water Resources Control Board**  
**Division of Water Quality**  
**1001 "I" Street, 17<sup>th</sup> Floor**  
**P.O. Box 944212**  
**Sacramento, CA 94244-2120.**  
**(916) 341-5873**  
[bacons@swrcb.ca.gov](mailto:bacons@swrcb.ca.gov)

Back-up contact person:

**Mr. Raed Mahdi**  
**State Water Resources Control Board**  
**Division of Water Quality**  
**1001 "I" Street, 17<sup>th</sup> Floor**  
**P.O. Box 944212**  
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